

1. A method for providing a hyper-dense photonic signal, the method comprising:  
providing a photonic carrier;  
providing first information having a first bandwidth corresponding thereto;  
modulating the photonic carrier to embody the first information therein at a photonic  
bandwidth less than the first bandwidth.

2. The method of claim 1, wherein modulating the photonic carrier further comprises  
photonicallly modulating the photonic carrier.

3. The method of claim 2, wherein photonicallly modulating further comprises  
maintaining the energy of the hyper-dense photonic signal substantially within the photonic  
bandwidth.

4. The method of claim 2, wherein photonicallly modulating remains substantially  
devoid of generating photonic sidebands.

5. The method of claim 2, wherein modulating the photonic carrier further comprises  
modulating the photonic carrier absent photonic sidebands.

6. A method for providing a hyperdense photonic signal, the method comprising:

providing a photonic carrier;

providing first information having a first bandwidth;

modulating the photonic carrier to embody the first information therein and producing

5 a composite signal comprising the photonic carrier and a photonic sideband associated therewith;

segregating the photonic carrier from at least a portion of the photonic sideband to  
provide an output signal having a photonic bandwidth less than the first bandwidth.

7. The method of claim 6, wherein segregating further comprises segregating an

10 upper sideband and a lower sideband from the photonic carrier.

8. The method of claim 6, wherein segregating further comprises selectively

attenuating the photonic sidebands associated with the photonic carrier.

15 9. The method of claim 6, wherein segregation further comprises:

dispersing energy of the composite signal by passing the composite signal through a  
dispersive photonic element selected from the group consisting of a prism, a hologram, and a  
diffraction grating; and

separating the output signal from the dispersed energy.

10. The method of claim 6, further comprising:

detecting the hyper-dense signal; and

producing an output signal therefrom, containing the first information having the first bandwidth.

5

11. The method of claim 6, further comprising transmitting the ultra-narrowband

signal to a destination prior to detection.

12. A method for producing a suppressed-sideband signal, the method comprising:

providing a photonic signal;

modulating the photonic signal to embody therein information having a first bandwidth;

and

selectively attenuating photonic sidebands associated with the photonic signal to provide an output signal having a photonic bandwidth narrower than the first bandwidth.

13. The method of claim 12 wherein most of the energy corresponding to the photonic

signal is segregated into frequencies exclusive of the suppressed sidebands.